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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,554	12/31/2003	Muralcedhara Herur Navada	10559-906001 / P17954	5716
20/985	7590	06/26/2008		
FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER NGUYEN, VAN KIM T	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 06/26/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/750,554

**Applicant(s)**

NAVADA ET AL.

**Examiner**

Van Kim T. Nguyen

**Art Unit**

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SI/02)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office Action is responsive to communications filed on May 28, 2008.

Claims 1-26 are pending in the case.

#### ***Response to Arguments***

2. Applicant's arguments, see page 7, with respect to the rejection of claims 8-14 under 35 U.S.C. §112 have been fully considered and are persuasive. The Examiner accepts Applicant's reasoning that "memories and other types of storage devices such as hard drives and CD-ROM may be implemented as computer-readable medium". Accordingly, the rejection of claims 8-14 under 35 U.S.C. §112 has been withdrawn.

3. Applicants' command regarding filing a terminal disclaimer is noted; however, the double patenting rejection is remained.

4. Applicant's arguments with respect to claims 1-26 have been considered but are moot in view of the new grounds of rejection.

#### ***Double Patenting***

5. Claims 1, 3-5, 7-8, 10-12, 14-15, 17-18, 20-21, 23-24 and 26 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-2, 4-5, 7-9, 11-12, 14-15, 16, 18-19, 21-22, and 24-25, of copending Application No. 10/749,792, respectively, in view of Sallet et al (US 6,490,276). Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims recite substantially same limitations, except delivering the packet to an exception processor being shared by the packet forwarding device in the stack. Sallet discloses a method for forwarding a data frame from a first switch to a second switch, thus it would have been obvious to one of

ordinary skill in the art at the time the invention was made to apply Sallet's method of forwarding data frames to the instance application in order to transmit data effectively.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

***Claim Rejections - 35 USC § 103***

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-4, 7-11, 14-17 and 18-26 are rejected under 35 U.S.C. 103(a) as being anticipated by Hebb et al (US 6,463,067), in view of Salett et al (US 6,490,276), and further in view of Kalkunte et al (US 7,139,269).

Regarding claims 1, 8, 15, 18, 21 and 24, Hebb discloses a method comprising:

receiving a packet at a first device in a stack of packet forwarding devices configured to direct the packet to a destination external to the stack (e.g., a packet is received at a line interface in a stack of line interfaces, configured to forward the packet to a destination address contained within the packet; Figure 1, col. 1: lines 28-47);

identifying an exception associated with the packet (e.g., identifying the forwarding and filtering information associated with the packet; col. 1: lines 36-45).

Hebb discloses substantially all the claimed limitations, except inserting a vector in the packet for delivering the packet to an exception processor being shared by the packet forwarding devices in the stack.

Salett teaches inserting a vector in the packet for delivering the packet to an exception processor (e.g., using/updating a 64-bit header to indicate destination information for each set of data frames transmitted on the network; col. 3: lines 44-63 and col. 4: lines 15-21).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Sallet's method of identifying stations and switches in Hebb's system in order to optimize the amount of resources required for a network.

However, Hebb-Salett does not explicitly call for the exception processor being shared by the packet forwarding devices in the stack.

As shown in Figure 41, Kalkunte teaches the server (port 8) is being shared by clients (ports 1-6).

Kalkunte's shared exception processor is a well-known configuration in the art, e.g., a router routes traffic for many sources or a server can be shared among/connected to many clients. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made that Kalkunte's shared exception processor is a viable option in Hebb-Salett's system.

Regarding claims 2, 9, 16, 19, 22 and 25, Hebb-Salett-Kalkunte also discloses inserting a flag in the packet that indicates the packet is associated with the identified exception (e.g., the header provides six bits for the destination; Salett, col. 4: lines 18-21).

Regarding claims 3, 10, 17, 20, 23 and 26, Hebb-Salett-Kalkunte also discloses using the vector and a table to determine a port for sending the packet to the first device in the stack of

packet forwarding devices (using 64-bit word and CAM 213, 221 to transfer data frames between a port to a switch or between switches, e.g., when station A215 first transmits a data frame, it is received by switch 205 on port 4. The CAM 213 in switch 205 updates a station list contained in the CAM 213 to indicate that station A215 is on port 4; Salett, col. 4: lines 39-50).

Regarding claims 4 and 11, Hebb-Salett-Kalkunte also discloses the vector includes a bit identifying the first device in the stack of packet forwarding devices (e.g., the lower 56 bits of the 64-bit CAM cycle word is used to indicate source or routing information for a data frame, with bits 48-55 are used to indicate the network switches; Salett, col. 3: lines 44-63).

Regarding claims 7 and 14, Hebb-Salett-Kalkunte also discloses the vector includes bits respectively identifying the packet forwarding devices in the stack (e.g., the lower 56 bits of the 64-bit CAM cycle word is used to indicate source or routing information for a data frame, with bits 48-55 are used to indicate the network switches; Salett, col. 3: lines 44-63).

8. Claims 5-6 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hebb-Salett-Kalkunte as respectively applied to claims 1 and 8 above, in view of Abali et al (US 5,721,820), hereinafter Abali.

Salett-Kalkunte discloses substantially all claimed limitations, except removing the vector from the packet for delivering the packet to the exception processor.

Abali teaches removing the vector from the packet for delivering the packet to the exception processor (e.g., in source-based routing scheme, switches do not make any intelligent routing decisions. The switch strips off the first word before forwarding the packet to the next level in the network. Thus the packet contains no routing information upon arriving its ultimate destination; col. 1: lines 46-65).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to apply Abali's method of routing data in Hebb-Salett-Kalkunte's system in order to provide data routing in a topology independent fashion that satisfies cost, performance and resource constraints.

Regarding claims 6 and 13, Hebb-Salett-Kalkunte-Abali also discloses the packet is delivered over a transmission line in an aggregate of transmission lines to the exception processor shared by the packet forwarding devices in the stack (Abali; Figure 1, communications in the network is facilitated by links connecting the processors or switches; col. 3: lines 3-25).

### ***Conclusion***

9. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN KIM T. NGUYEN whose telephone number is (571)272-3073. The examiner can normally be reached on 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Van Kim T. Nguyen  
Examiner  
Art Unit 2152

/Bunjob Jaroenchonwanit/

Supervisory Patent Examiner, Art Unit 2152